IN THE SPECIFICATION

Please replace the paragraph beginning at page 26, line 14, with the following rewritten paragraph:

Genomic DNA from C. pneumoniae strain TW183 (American Type Culture Collection, Virginia, U.S.A.; ATCC No. VR-2282) was prepared from purified bacteria using the RapidPrepTM Micro Genomic DNA isolation kit (Amersham Pharmacia Biotech). The 5' part of different Chlamydia genes, including about 30 nucleotides located upstream from the proposed translation start sites and the first 30 to 99 codons, were amplified by PCR using the primers listed in Table 1. For the myc/HIS tagged constructs, the forward and reverse primers contained additional XhoI and EcoRI sites, respectively, to allow cloning of the PCR fragments between the XhoI and EcoRI sites of the pTrcHis2A vector (Invitrogen, Groningen, The Netherlands). For the Inc/cya constructs, the forward and reverse primers contained additional HindIII and XbaI sites, respectively, to allow cloning of the PCR fragments between the HindIII and XbaI sites of the puc19cya vector. This vector was constructed by cloning the XbaI-EcoRI fragment of plasmid pMS109, which carried the cya gene of Bordetella pertussis (Sory, M.P., and G.R. Cornelis. (1994). Translocation of a hybrid YopE-adenylate cyclase from Yersinia enterocolitica into HeLa cells. Mol. Microbiol. 14: 583-94), between XbaI and EcoRI sites of the pUC 19 vector. In the recombinant plasmids, transcription of the hybrid genes was under the control of the *lac* promoter of the vector. Recombinant plasmids were amplified in E. coli TG1 and the sequence of all constructs was checked by sequencing. Methods of sequencing nucleic acids are known in the art and are described in, for example, Sambrook et al., Molecular Cloning: A Laboratory Manual, Cold Spring Harbor Laboratory, New York (1989) and Current Protocols in Molecular Biology, Ausebel et al, eds., John Wiley and Sons, Inc., New York (2000).

Please replace the paragraph beginning at page 29, line 2, with the following rewritten paragraph:

C. trachomatis and C. pneumoniae genomes <u>have been described</u> ean be found on the websites: <u>http://chlamydia.www.berkeley.edu:4231</u> and <u>http://www.tigr.org/tdb/</u>.

Please replace the paragraph beginning at page 34, line 23, with the following rewritten paragraph:

Detecting secreted proteins by the type III secretion system by *Shigella flexneri* colonies. The secretion of 122 proteins coded by *C. pneumoniae* strain CWL029 genome were tested (Nature Genetics (1999) 21:385, the gene sequences <u>have been described</u> can be found at http://chlamydia-www.berkeley.edu:4231/ and in GenBank under the accession number AE 001363, which are incorporated herein by reference). Chimeras consisted of the fusion between the amino terminal domain of chlamydial proteins and the cyclase reporter gene (CPn/cya chimera) as described in Subtil et al 2001. Forty-three chimeras were found to be secreted. They can be classified into 4 categories:

Please replace the paragraph beginning at page 36, line 20, with the following rewritten paragraph:

Category 4 - Chimeras which do not belong to the Inc family of proteins and in which the amino-terminal part is coded by a gene that has an homolog in *C. trachomatis* and/or *C. psittaci* genomes (*C. trachomatis* serovar D gene sequences have been described ean be found at http://chlamydia-www.berkeley.edu:4231/ Science (1998) 282:754, and in GenBank under the accession number AE 001273, which are incorporated herein by reference; *C. psittaci* GPIC strain unfinished genome was provided by TIGR. TIGR at http://www.tigr.org/egi-bin/BlastSearch/blast.egi

Please replace the paragraph beginning at page 36, line 20, with the following rewritten paragraph:

Transformed *ipaB* colonies expressing a CPn/cya chimera were isolated on plates containing the Congo Red dye. Only red colonies, indicative of a constitutive high level of type III secretion, were considered. Such colonies were picked on a LB plate and incubated for 6 hours at 37 C. A polyvinylidene fluoride membrane (Immobilon P Immobilon P, Millipore) was deposited briefly incubated in ethanol and then processed for Western blotting using anti-cyclase antibody described (Subtil et al (2001) Mol. Microbiol. 39:792-800).

Revelation was done by enhanced chemifluorescence (Amersham). The signal for colonies in which the CPn/cya chimeras were not secreted was restricted to the area of the membrane that had been in contact with the colonies. The signal for colonies in which the CPn/cya chimeras were secreted appeared as a halo around the area of the membrane that had been in contact with the colonies.